# Rare seabird sightings from a pelagic longline vessel off South Africa, July–September 2013

Dominic P. Rollinson

Observations d'oiseaux de mer rares au large de l'Afrique du Sud à partir d'un palangrier en juilletseptembre 2013. L'auteur rapporte des observations d'oiseaux de mer rares ou peu communs, effectuées au large de l'Afrique du Sud pendant un voyage de 79 jours à bord d'un palangrier. La plupart des observations concernent des espèces sub-antarctiques qui sont normalement confinées aux eaux plus froides au sud, mais qui s'aventurent occasionnellement plus au nord, surtout pendant l'hiver et le printemps australs. Quelques espèces qui sont supposées fréquenter les eaux sud-africaines uniquement au passage ont également été notées. Ces observations indiquent que certaines espèces d'oiseaux de mer rares pourraient fréquenter les eaux sud-africaines plus souvent qu'on ne le pensait.

**Summary.** This paper reports several rare and scarce seabirds recorded off South Africa during a 79-day trip on board a pelagic longline vessel. Most sightings were of subantarctic species that are normally restricted to colder waters further south, but are known to occasionally venture north, especially during the austral winter and spring. A few species which are thought to enter southern African waters only on passage were also observed. These sightings suggest that several rare seabird species may occur more frequently in South African waters than previously thought.

The productive waters off South Africa provide rich foraging opportunities for a number of seabird species (Ryan & Rose 1987). Approximately 60 species of Procellariiformes have been recorded within the southern African subregion, many of which are considered rare vagrants (Hockey *et al.* 2005). Seabird diversity and numbers increase during winter and spring, when numerous subantarctic breeding species escape the colder conditions of high latitudes and forage in the temperate waters off South Africa (Crawford *et al.* 1991). Here I report on rare seabirds observed off South Africa during winter/spring 2013.

Seabirds were recorded opportunistically for 79 days at sea from a pelagic longline vessel operating off South Africa between 1 July and 20 September 2013. Fishing operations were conducted on 62 days, with six days of no fishing due to bad weather. Most sightings were made during hauling operations, when birds congregated behind the vessel to scavenge for bait discards and offal. Additional sightings were made while steaming between fishing grounds (11 days). Fishing operations occurred in three distinct areas: *c.*400–650 km south-east of Durban (17 days), close offshore to Port Elizabeth (15 days) and *c.*300–350 km south of Cape Agulhas (36 days) (Fig. 1).

Many sightings were confirmed after studying photographs taken with a digital SLR camera

and a 300-mm telephoto lens. Records of species observed within South African waters and considered national rarities were submitted to, and have been accepted by, the South African National Rarities Committee. For some of the more frequently encountered species (Wandering *Diomedea exulans*, Northern Royal *D. sanfordi* and Southern Royal Albatrosses *D. epomophora* and Grey Petrel *Procellaria cinerea*) daily counts were conducted which were summed to give a total count for the entire trip. It is probable that the same individuals were seen on different days and the trip totals for these species should therefore be treated with caution.

Locations and dates of sightings of rare and unusual seabird species are summarised in Table 1. Fig. 1 shows the three primary fishing areas as well

**Figure 1.** Map of route taken during the study, with the South African exclusive economic zone (SA EEZ), 200 m and 1,000 m isobars depicted. The three primary fishing areas are marked as **a** (c,400–650 km south-east of Durban), **b** (close offshore to Port Elizabeth) and **c** (c.300–350 km south of Cape Agulhas).

Carte du trajet suivi pendant l'étude ; la zone économique exclusive sud-africaine (SA EEZ) et les isobares de 200 m et 1.000 m sont également marquées. Les trois zones de pêche principales sont indiquées comme **a** (environ 400–650 km au sud-est de Durban), **b** (pas très loin au large de Port Elizabeth) et **c** (environ 300–350 km au sud de Cape Agulhas).

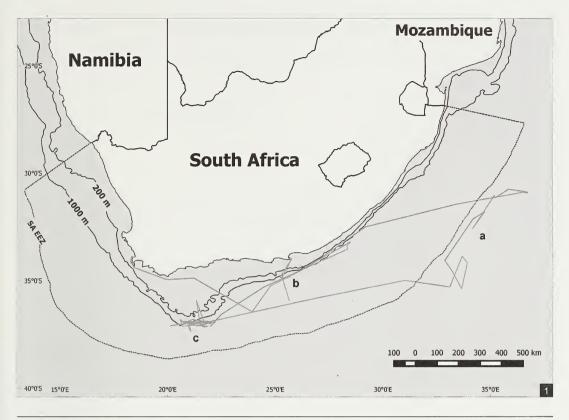


Table 1. Rare seabirds recorded off South Africa, July–September 2013.
Tableau 1. Oiseaux de mer rares observés au large de l'Afrique du Sud en juillet-septembre 2013.

		MONTH			TOTAL		AREA		
		July	August	September		SE of Durban	Agulhas Bank	Port Elizabeth	
Wandering Albatross	Diomedea exulans	59	73	10	142	31	98	13	
<sup>1</sup> Tristan Albatross	Diomedea dabbenena	2	3	-	. 5	-	5	-	
Northern Royal Albatross	Diomedea sanfordi	4	29	9	42	-	39	3	
Southern Royal Albatross	Diomedea epomophora	2	16	5	23	-	19	4	
<sup>1</sup> Salvin's Albatross	Thalassarche salvini	-	1	-	1	-	1	-	
<sup>2</sup> Grey-headed Albatross	Thalassarche chrysostoma	1	-		1	1	-	-	
<sup>1</sup> Sooty Albatross	Phoebetria fusca	6	-	-	6	4	-	2	
<sup>2</sup> Light-mantled Albatross	Phoebetria palpebrata	2	-	-	2	2	-	-	
<sup>1</sup> Grey Petrel	Procellaria cinerea	22	5	-	27	17	8	2	
Spectacled Petrel	Procellaria conspicillata	-	3	-	3	-	3	-	
Atlantic Petrel	Pterodroma incerta	-	1	-	1	-	1	-	
Blue Petrel	Halobaena caerulea	-	2	2	4	-	2	2	
<sup>1</sup> Slender-billed Prion	Pachyptila belcheri	_	1	-	1	-	1	-	
Totals		100	135	26	261	55	178	28	

<sup>1</sup> Record accepted by the South African National Rarities Committee.

<sup>2</sup>Recorded in international waters alone.

 Table 2. Common seabirds recorded off South Africa, July–September 2013.

 Tableau 2. Oiseaux de mer communs observés au large de l'Afrique du Sud en juillet–septembre 2013.

		Abundance	Area
Shy Albatross	Thalassarche cauta / steadi	Seen daily in large numbers	All
Indian Yellow-nosed Albatross	Thalassarche carteri	Seen daily in large numbers	All
Atlantic Yellow-nosed Albatross	Thalassarche chlororhynchos	Seen daily in large numbers	All, except east coast
Black-browed Albatross	Thalassarche melanophris	Seen daily but fewer than T. carteri	All
Southern Giant Petrel	Macronectes giganteus	Seen on most fishing days	All
Northern Giant Petrel	Macronectes halli	Seen on most fishing days	All
Pintado Petrel	Daption capense	Seen daily in large numbers	All
White-chinned Petrel	Procellaria aequinoctialis	Seen daily in large numbers	All
Sooty Shearwater	Puffinus griseus	Seen on most days in low numbers	All
Flesh-footed Shearwater	Puffinus carneipes	Seen once	Cape Agulhas
Cory's Shearwater	Calonectris diomedea	Seen on two occasions only	Cape Agulhas
Manx Shearwater	Puffinus puffinus	Seen once	Cape Agulhas
Great-winged Petrel	Pterodroma macroptera	Seen on most days in low numbers	All
Soft-plumaged Petrel	Pterodroma mollis	Seen on most days in low numbers	All
Antarctic Prion	Pachyptila desolata	Seen on most days in low numbers	All
Wilson's Storm-petrel	Oceanites oceanicus	Seen daily in large numbers	All
Black-bellied Storm-petrel	Fregetta tropica	Seen in small numbers from September	All
Cape Gannet	Morus capensis	Seen in small numbers close to the coast	All, except east coast
Subantarctic Skua	Catharacta antarctica	Seen on most days in low numbers	All
Tern sp.	Sterna sp.	Small flocks seen occasionally	All
Kelp Gull	Larus dominicanus	Coastal areas only	All
Hartlaub's Gull	Larus hartlaubii	Coastal areas only	All, except east coast

as the route taken by the vessel. Figs. 2–6 show the location of all rare bird records. Table 2 lists other common species seen throughout the trip with an approximate estimation of abundance as well as area recorded.

## Wandering Albatross Diomedea exulans

Recorded on 48 of the 79 days at sea. Most common off the Agulhas Bank (seen on 29 of 36 days; Figs. 2 & 7) and less frequent off Port Elizabeth (eight of 15 days) and south-east of Durban (11 of 17 days; Fig. 2). In total, 142 sightings were made, the majority off the Agulhas Bank (*c*.70%), with smaller numbers south-east of Durban and off Port Elizabeth (Table 1). As many as ten individuals scavenged behind the vessel while fishing off the Agulhas Bank. Largest numbers were in July–August, with smaller numbers in September (Table 1). All plumage stages were seen, from juveniles to almost all-white old adult males.

Wandering Albatrosses breed on subantarctic islands, the nearest being the Prince Edward and

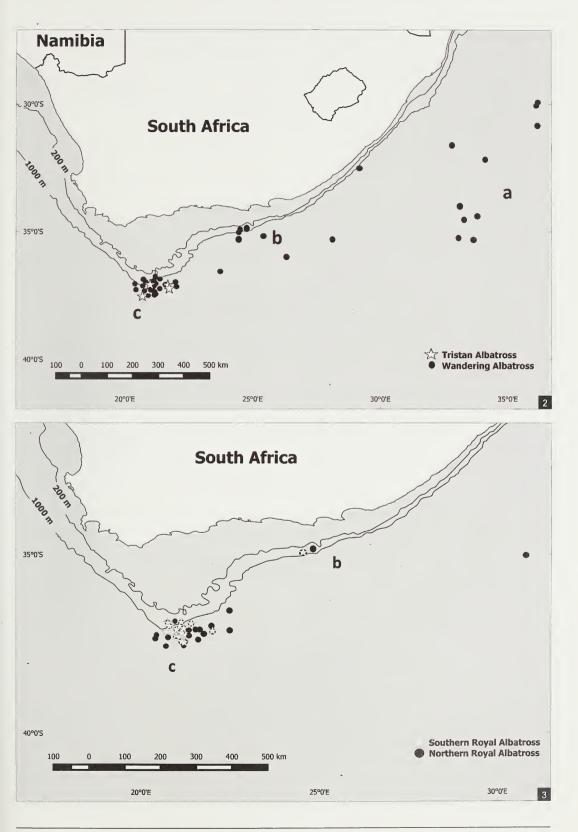
**Figure 2.** Sightings of Tristan Albatross *Diomedea dabbenena* and Wandering Albatross *D. exulans* during the study.

Observations de l'Albatros de Tristan *Diomedea dabbenena* et l'Albatros hurleur *D. exulans* pendant l'étude.

**Figure 3.** Sightings of Southern *Diomedea epomophora* and Northern Royal Albatross *D. sanfordi* during the study.

Observations de l'Albatros royal *Diomedea epomophora* et l'Albatros de Sanford *D. sanfordi* pendant l'étude.

Crozet Islands, the others including Kerguelen, Heard, Macquarie and South Georgia (Shirihai 2007). Post-breeding adults are known to travel from South Georgia to South African waters in 6–10 days (Prince *et al.* 1998). I photographed an immature with a green colour ring c.400 km east of East London, which was probably ringed on Bird Island, South Georgia, as one of the 2011/12 cohort of fledglings (A. Wood pers. comm.). The species is scarce over the continental shelf but is recorded more



Rare seabird sightings off South Africa: Rollinson

regularly in oceanic waters, with most sightings off west and south coasts (Hockey *et al.* 2005). It is observed with some frequency during pelagic birdwatching trips operating from the Cape Peninsula, but numbers have declined in recent years (Hockey *et al.* 2005). Cyrus & Robson (1980) recorded them as frequent visitors to the KwaZulu-Natal coast during the atlas period (1970–80), but there have been very few records in recent years.

## Tristan Albatross Diomedea dabbenena

Four confirmed sightings were made, all south of Cape Agulhas in oceanic waters (Fig. 2), although others might have been confused with Wandering Albatrosses. The birds were separated from Wandering Albatrosses by the presence of a yellow alphanumeric ring (Fig. 7; all unringed *D. exulans | dabbenena* were presumed to be *D. exulans*). Ring numbers permitted ageing and sexing. All were adult males 19–35 years old, which had previously bred on Gough Island. Two were failed breeders from 2013, one failed in 2012, while the fourth successfully raised a chick on its last breeding attempt in 2009.

Tristan Albatross is Critically Endangered and endemic to the islands of Gough and Inaccessible, where it is thought to number c.9,000 birds (Shirihai 2007). The population has decreased in recent years, mostly due to longline fishing and the introduction of mice to Gough Island (Wanless et al. 2009). The species is considered uncommon in oceanic waters off the west coast and rare elsewhere in the subregion (Hockey et al. 2005). Prior to this study, there were only eight confirmed records from southern African waters: five from the west coast of South Africa and Namibia (Hockey et al. 2005, Goren & Ryan 2010), one south of Cape Agulhas (B. Rose pers. comm.), one dead bird at Port Elizabeth (Ryan et al. 2001) and one killed by a longline vessel off Durban (Cooper 2011). Of these, only three previous sight records (of colour-banded individuals) exist, the other records all involved recoveries of dead birds. Two additional sightings have been made in South African waters since; one south of Cape Point (pers. obs.) and another west of Cape Town (P. Ryan pers. comm.). However, as demonstrated by Reid et al. (2013), **Figure 4**. Sightings of Salvin's *Thalassarche salvini*, Grey-headed *T. chrysostoma*, Sooty *Phoebetria fusca* and Light-mantled Albatross *P. palpebrata* during the study.

Observations de l'Albatros de Salvin *Thalassarche salvini*, l'Albatros à tête grise *T. chrysostoma*, l'Albatros brun *Phoebetria fusca* et l'Albatros fuligineux *P. palpebrata* pendant l'étude.

Figure 5. Sightings of Grey *Procellaria cinerea*, Spectacled *P. conspicillata* and Atlantic Petrels *Pterodroma incerta* during the study.

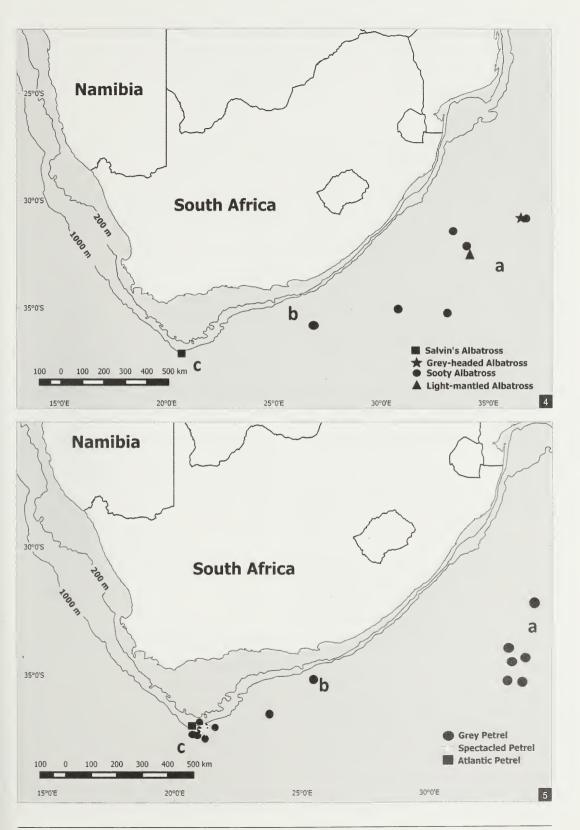
Observations du Puffin gris *Procellaria cinerea*, du Pétrel à lunettes *P. conspicillata* et du Pétrel de Schlegel *Pterodroma incerta* pendant l'étude.

Tristan Albatrosses regularly visit South African waters, particularly non-breeding birds in April– October. Due to the difficulty of separating the species from Wandering Albatross at sea (Ryan 2000), many are presumably overlooked.

# Northern Royal Albatross Diomedea sanfordi

Forty-two were recorded on 33 days, mainly off the Agulhas Bank in August, with smaller numbers off Port Elizabeth (Table 1; Fig. 7). None was seen south-east of Durban, which is unsurprising as the species has not been recorded from the KwaZulu-Natal coast (Hockey *et al.* 2005). Most sightings were in water >1,000 m deep, although the species was also regularly seen in shallower water off Port Elizabeth in September (Fig. 3). Many were juveniles / younger immatures, separated from adults by the dark brown blotching on the lower back and rump, as well as dark brown flecks on the crown and dark tail tip.

The species is thought to mostly occur off South Africa during passage from its wintering grounds off South America to its breeding grounds off New Zealand (Shirihai 2007). My sightings suggest that it occurs more regularly in oceanic waters off South Africa than previously thought. Northern Royal Albatrosses are regularly recorded in southern African waters, mostly over the continental shelf edge off western and southern coasts (Hockey et al. 2005). In recent years they have been recorded in similar numbers to Wandering Albatross over the continental shelf, less frequently in oceanic waters (Hockey et al. 2005). Virtually all southern African records are in May–October, although there are records from April and November as well.



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**Southern Royal Albatross** *Diomedea epomophora* Recorded on far fewer occasions than the previous species (Fig. 3 & 7), with sightings on 20 days, mainly off the Agulhas Bank in August, with smaller numbers off Port Elizabeth in September (Table 1).

An estimated 8,200–8,600 pairs breed on the New Zealand islands of Campbell and Auckland, and range at sea between 36°S and 63°S (Shirihai 2007). They forage mostly in New Zealand waters, although many also visit seas around southern South America (Hockey *et al.* 2005).

The species is recorded less frequently than Northern Royal Albatross within the subregion and prefers waters >1,000 m deep, beyond the continental shelf edge (Hockey *et al.* 2005). Southern Royal Albatross is recorded annually in southern African waters, mostly in June–October. It appears to be restricted to the south coast of South Africa with no known records further north off the west or east coasts (Hockey *et al.* 2005).

# Salvin's Albatross Thalassarche salvini

A single immature was recorded off the Agulhas Bank in August (Figs. 4 & 8). Most previous southern African records are of adults, but younger birds may have been overlooked due to their similarity to juvenile / immature 'Shy' Albatross *T. cauta / steadi*.

Most Salvin's Albatrosses breed on New Zealand's subantarctic Snares and Bounty archipelagos. Birds either disperse west to the south-west Indian Ocean or east to western South America in winter (Shirihai 2007). Some seen in the Drake Passage and the south-western Atlantic Ocean may be the source of southern African records (Hockey *et al.* 2005). The species is a rare vagrant to the subregion, with confirmed sightings only since 2000, all from coastal Western Cape waters, with most in winter / spring (Hockey *et al.* 2005, Davis 2006).

# Grey-headed Albatross Thalassarche chrysostoma

A single juvenile was observed on two consecutive days *c*.400 km south-east of Durban in mid July while scavenging behind the vessel (Fig. 4).

Grey-headed Albatrosses breed throughout the circumpolar subantarctic islands, the nearest colonies being on the Prince Edward and Crozet groups. They are found most frequently over colder waters south of 40°S, although a few birds, mainly juveniles, wander north to 25°S (Hockey *et al.* 2005, Shirihai 2007). The species is recorded within the southern African subregion in most years, but not annually (Hockey *et al.* 2005). Almost all records are of juveniles and most are from the Western Cape in May–October, with fewer from Eastern Cape and exceptionally from KwaZulu-Natal, Namibia and southern Angola (Hockey *et al.* 2005).

# Sooty Albatross Phoebetria fusca

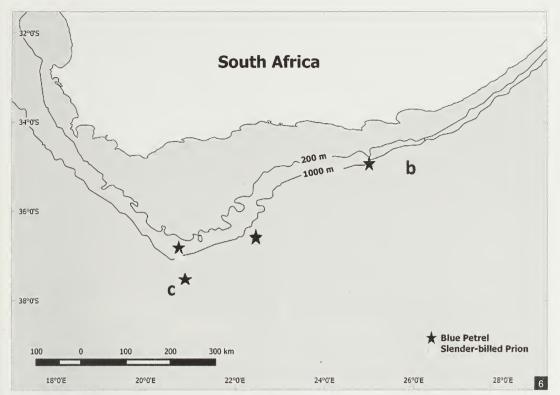
Only recorded in July, with four of the six birds south-east of Durban (Table 1). Three of these were seen in international waters (during hauling operations), one in South African waters c.20 km south-east of Durban (Fig. 9) and two together off Port Elizabeth while steaming to the Agulhas Bank (Fig. 4). All were in oceanic waters >1,000 m deep. One showed patchy grey colouring on the mantle and head, which is typical of immatures (Shirihai 2007), whereas all of the others were thought to be adults, based on plumage coloration.

Most Sooty Albatrosses breed on Gough, Tristan da Cunha and the Prince Edward Islands, ranging throughout the Southern Ocean, preferring deeper waters north of the Antarctic Convergence Zone and south of 30°S (Shirihai 2007). It is from these principal breeding grounds that most southern African records are thought to originate. The species is suspected to occur year-round in South African waters off south and south-west coasts (Hockey et al. 2005). Occasionally birds have been sighted further north off the east coast, off KwaZulu-Natal, exceptionally as far north as southern Mozambique. Most records closer inshore have been in winter, most probably vagrants to the shelf-break and slope (Hockey et al. 2005).

# Light-mantled Albatross Phoebetria palpebrata

Two sightings were made one week apart (thought to be the same individual) in international waters south-east of Durban (Fig. 4), during hauling operations. Once the bird followed the vessel, presumably waiting for offal discards (Fig. 10).

Light-mantled Albatrosses have a circumpolar breeding distribution on subantarctic islands, the nearest being the Prince Edwards and Crozets. They generally disperse south of 35°S, but wander further north off the west coast of South America (Onley & Schofield 2007). The species is a rare



**Figure 6.** Sightings of Blue Petrel *Halobaena caerulea* and Slender-billed Prion *Pachyptila belcheri* during the study. Observations du Prion bleu *Halobaena caerulea* et du Prion de Belcher *Pachyptila belcheri* pendant l'étude.

vagrant to southern African waters, with fewer than ten records to date (Hockey *et al.* 2005). Most are from the Western Cape in winter, with some stranded birds. Three are from the east coast: two stranded birds from southern Mozambique and the other from north-eastern KwaZulu-Natal (Hockey *et al.* 2005, Davis 2010).

#### Grey Petrel Procellaria cinerea

Of the 27 sightings, 22 were made in July; the majority were south-east of Durban (17 on six days; Figs. 5 & 11). As many as six were seen behind the vessel during hauling operations and the species was frequently observed diving for bait discards and offal. Seven sightings of eight birds were made during the 36 days spent fishing off the Agulhas Bank (Fig. 5).

Grey Petrels are winter breeders, with the nearest substantial breeding populations on Gough and the Prince Edward Islands; although they forage as far north as 25°S, they mainly remain south of 35°S (Onley & Schofield 2007). The species is considered rare in southern African waters, with most records from the south and west coasts in winter (Hockey *et al.* 2005). Records from the east coast are even rarer, although there have been a few records off KwaZulu-Natal in recent years (Davis 2011, 2015).

#### Spectacled Petrel Procellaria conspicillata

Three singles were encountered off the Agulhas Bank in August (Fig. 5), where they scavenged for bait discards and offal behind the vessel during hauling operations.

Spectacled Petrel is endemic as a breeder to Inaccessible Island in the Tristan da Cunha group, and is listed as Vulnerable with only 14,400 breeding pairs (Ryan *et al.* 2001). It ranges throughout the South Atlantic, mostly at 25–41°S (Hockey *et al.* 2005). It is an uncommon visitor to South African waters, mainly preferring oceanic waters up to the shelf edge, mostly off the west coast, with one record from KwaZulu-Natal (Hockey *et al.* 2005). Encountered year-round on pelagic trips from the Cape Peninsula (http:// www.zestforbirds.co.za).



Figure 7. Diomedea albatrosses observed off South Africa, July–September 2013: (a) Wandering Albatross D. exulans,
(b) Tristan Albatross D. dabbenena, (c) Southern Royal Albatross D. epomophora and (d) Northern Royal Albatross D. sanfordi (Dominic P. Rollinson)

Albatros du genre *Diomedea* observés au large de l'Afrique du Sud en juillet–septembre 2013 : (a) Albatros hurleur *D. exulans*, (b) Albatros de Tristan *D. dabbenena*, (c) Albatros royal *D. epomophora* et (d) Albatros de Sanford *D. sanfordi* (Dominic P. Rollinson)

#### Atlantic Petrel Pterodroma incerta

One was briefly observed during rough weather in August when fishing operations had been suspended, *c*.230 km south of Cape Agulhas in oceanic water (Fig. 5).

Atlantic Petrel is endemic to the Tristan da Cunha group and Gough Island, chiefly dispersing west to the central and south-western Atlantic (Shirihai 2007). Records from the Indian Ocean are rare, but individuals have been recorded as far as 104°E (Enticott 1991). The species is a rare visitor to South African waters, mostly south-west of Cape Town, in July–November, with just two records off the east coast, in August 1973 and September 1974 (Sinclair 1974, Cyrus & Robson 1980, Hockey *et al.* 2005).

## Blue Petrel Halobaena caerulea

Four were observed in southern African waters (Figs. 6 & 12), three off the Agulhas Bank in August (two in water >1,000 m deep) and one off Port Elizabeth in September (also in water >1,000 m deep). Three of the four briefly followed the vessel during hauling operations.



**Figure 8.** Immature Salvin's Albatross *Thalassarche salvini*, south of Cape Agulhas, 16 August 2013 (Dominic P. Rollinson)

Albatros de Salvin *Thalassarche salvini* immature, au sud de Cape Agulhas, 16 août 2013 (Dominic P. Rollinson)

Figures 9–10. Sooty Albatross *Phoebetria fusca*, 11 July 2013 and Light-mantled Albatross *P. palpebrata*, southeast of Durban, 20 July 2013 (Dominic P. Rollinson)

Albatros brun *Phoebetria fusca*, 11 juillet 2013 et Albatros fuligineux *P. palpebrata*, au sud-est de Durban, 20 juillet 2013 (Dominic P. Rollinson)

Blue Petrels have a circumpolar breeding distribution on Southern Ocean islands with the nearest populations nesting on the Prince Edwards and Crozets (Shirihai 2007). Young birds are thought to wander prior to breeding (Shirihai 2007), perhaps accounting for some of the vagrants to the subregion. Blue Petrels are rare winter visitors to southern African waters, but are prone to major irruptions, during which they can occur in large numbers (Ryan et al. 1989). The last major irruption was July-August 1984 when 76 were 'wrecked' on beaches across South Africa, coinciding with wrecks in Brazil and Australasia (Ryan et al. 1989). Observations at sea off the Northern and Western Cape prior to this wreck indicated that the irruption preceded the wreck by some weeks (Ryan et al. 1989). Since 1984 there have been very few sightings in South





African waters, with only one bird seen on Cape Point pelagic trips (B. Rose pers. comm.); the few other sightings have been in deeper waters further offshore.



Figure 11. Grey Petrel *Procellaria cinerea*, south-east of Durban, 20 July 2013 (Dominic P. Rollinson)

Puffin gris *Procellaria cinerea*, au sud-est de Durban, 20 juillet 2013 (Dominic P. Rollinson)

**Figure 12.** Blue Petrel *Halobaena caerulea*, south of Port Elizabeth, 2 September 2013 (Dominic P. Rollinson) Prion bleu *Halobaena caerulea*, au sud de Port Elizabeth,

2 septembre 2013 (Dominic P. Rollinson)

## Slender-billed Prion Pachyptila belcheri

A single was observed behind the vessel amongst Antarctic Prions *P. desolata* during hauling operations south of Cape Agulhas in water >1,000 m deep (Fig. 6).

Slender-billed Prions breed on subantarctic islands including the Falklands, Crozets and Kerguelen (Shirihai 2007). The origin of southern African birds is unknown, but is thought to be Kerguelen (Hockey *et al.* 2005). The species is a rare visitor to continental shelf waters, with small numbers seen in most years off the Cape Peninsula (Hockey *et al.* 2005). During the 1984 seabird irruption large numbers of 'wrecked' Slenderbilled Prions were washed up on South African beaches, from the Northern Cape to KwaZulu-Natal (Ryan *et al.* 1989). Due to its similarity with other prion species, it is probable that many are overlooked.



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## References

- Cooper, J. 2011. Tristan Albatross caught by a longliner off Durban, South Africa, represents an at-sea range extension. https://owl.english.purdue.edu/ owl/resource /560/10/ (accessed May 2015)
- Crawford, R. J. M., Ryan, P. G. & Williams, A. J. 1991. Seabird consumption and production in the Benguela and western Agulhas ecosystems. S. Afr. J. Mar. Sci. 11: 357–375.
- Cyrus, D. & Robson, N. 1980. *Bird Atlas of Natal.* Pietermaritzburg: University of Natal Press.
- Davis, S. 2006. KwaZulu-Natal Recorder's Report, October 2006. KZN Birds 18: 24.
- Davis, S. 2010. KwaZulu-Natal Recorder's Report, October 2010. KZN Birds 31: 29.
- Davis, S. 2011. KwaZulu-Natal Recorder's Report, February 2011. *KZN Birds* 32: 29.

- Davis, S. 2015. KwaZulu-Natal Recorder's Report, March 2015. *KZN Birds* 44: 31.
- Enticott, J. W. 1991. Distribution of the Atlantic Petrel (*Pterodroma incerta*) at sea. *Mar. Orn.* 19: 49–60.
- Goren, M. & Ryan, P. G. 2010. Tristan Albatrosses off South Africa. *Africa—Birds & Birding* 15: 14.
- Hockey, P. A. R., Dean, W. R. J. & Ryan, P. G. (eds.) 2005. *Roberts—Birds of Southern Africa*. Seventh edn. Cape Town: Trustees of the John Voelcker Bird Book Fund.
- Onley, D. & Schofield, P. 2007. *Albatrosses, Petrels and Shearwaters of the World*. London, UK: A. & C. Black.
- Petersen, S. L., Honig, M. B., Ryan, P. G. & Underhill, L. G. 2009. Seabird bycatch in the pelagic longline fishery off southern Africa. *Afr. J. Mar. Sci.* 31: 191–204.
- Prince, P. A., Croxall, J. P., Trathan, P. N. & Wood, A. G. 1998. The pelagic distribution of South Georgia albatrosses and their relationships with fisheries. In Robertson, G. & Gales, R. (eds.) *Albatross Biology and Conservation*. Chipping Norton: Surrey Beatty & Sons.
- Reid, T. A., Wanless, R. M., Hilton, G. M., Philips, R. A. & Ryan, P. G. 2013. Foraging range and habitat associations of non-breeding Tristan albatrosses: overlap with fisheries and implications for conservation. *Endangered Species Res.* 22: 39–49.
- Ryan, P. G. 2000. Separating Albatrosses; Tristan or Wandering? *Africa—Birds & Birding* 5: 35–39.
- Ryan, P. G. & Ronconi, R. A. 2011. Continued increase in numbers of Spectacled Petrels *Procellaria conspicillata. Antarctic Sci.* 23: 332–336.

- Ryan, P. G. & Rose, B. 1995. Migrant seabirds. In Payne, A. I. L. & Crawford, R. J. M. (eds.) Oceans of Life off Southern Africa. Second edn. Cape Town: Vlaeberg.
- Ryan, P. G., Avery, G., Rose, B., Ross, G. J. B., Sinclair, J. C. & Vernon, C. J. 1989. The Southern Ocean seabird irruption to South African waters. *Cormorant* 17: 41–55.
- Ryan, P. G., Cooper, J. & Glass, J. P. 2001. Population status, breeding biology and conservation of the Tristan Albatross *Diomedea [exulans] dabbenena*. *Bird Conserv. Intern.* 11: 35–48.
- Shirihai, H. 2007. A Complete Guide to Antarctic Wildlife: The Birds and Marine Mammals of the Antarctic Continent and Southern Ocean. Second edn. London, UK: A. & C. Black.
- Sinclair, J. C. 1974. Schlegel's Petrel (*Pterodroma incerta*). New distributional data: 5. Ostrich 45: 133.
- Wanless, R. M., Ryan, P. G., Altwegg, R., Angel, A., Cooper. J., Cuthbert, R. & Hilton, G. M. 2009. From both sides: dire demographic consequences of carnivorous mice and longlining for the Critically Endangered Tristan albatrosses on Gough Island. *Biol. Conserv.* 142: 1710–1718.

DST/NRF Centre of Excellence at the Percy FitzPatrick Institute, University of Cape Town, Private Bag X3, Rondebosch, 7701, South Africa. E-mail: domrollinson@ gmail.com

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